

IN THE CLAIMS

Please amend claims 1-8 as shown below.

Please add new claims 9-16.

A clean version of the entire set of pending claims 1-16 follows per 37 CFR § 1.121(c)(3). A marked-up copy of claims 1-8, showing all changes made relative to the previous version of the claim(s), accompanies this paper on separate sheets.

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B1

A1
Cont

1. (AMENDED) A display device comprising a liquid crystal between a first substrate provided with row or selection electrodes and a second substrate provided with column or data electrodes, in which overlapping parts of row and column electrodes define pixels, drive means for driving the column electrodes in conformity with an image to be displayed, and drive means for driving the row electrodes which, in the operating condition, sequentially supply groups of p row electrodes with p mutually orthogonal signals, wherein the mutually orthogonal signals are obtained from at least two types of orthogonal functions having four elementary units of time, within which four elementary units of time one pulse each time has a first polarity which opposes a second polarity of the other pulses.

2. (AMENDED) The display device of claim 1, wherein the orthogonal signals are obtained from orthogonal functions having four elementary units of time, within which four elementary units of time the one pulse having the first polarity which opposes the second polarity of the other pulses each time shifts by one elementary unit of time.

3. (AMENDED) The display device of claim 1 or 2, wherein the orthogonal signals are obtained from orthogonal functions having four elementary units of time which, viewed in a time sequence, are situated one after the other.

4. (AMENDED) The display device of claim 3, wherein at least two orthogonal signals have opposed DC contents.

5. (AMENDED) The display device of claim 1 or 2, wherein the orthogonal signals are obtained from orthogonal functions having four elementary units of time, in which the elementary units of the orthogonal functions are interwoven.

6. (AMENDED) The display device of claim 1 or 2, wherein $p = 4$, and in that four orthogonal signals have identical DC contents and four are free from a DC voltage.

7. (AMENDED) The display device of claim 6, wherein the DC content of 2 orthogonal signals of the orthogonal signals having an identical DC content is opposed to that of the two other orthogonal signals.

8. (AMENDED) The display device of claim 1 or 2, wherein the drive means inverts the orthogonal signals after each frame period.

9. (NEW) A display device, comprising:
a plurality of pixels defined by an overlapping of a plurality of row electrodes and a plurality of column electrodes; and
drive means for driving said plurality of row electrodes to sequentially supply groups of p row electrodes with p mutually orthogonal signals,
wherein the p mutually orthogonal signals are obtained from at least two types of orthogonal functions having four elementary units of time, and
wherein, for each elementary unit of time, one pulse has a first polarity that opposes a second polarity of the other pulses.

10. (NEW) The display device of claim 9, wherein the one pulse having the first polarity which opposes the second polarity of the other pulses is shifted among the fourth elementary units of time.

11. (NEW) The display device of claim 9, wherein the four elementary units of time viewed in a time sequence are situated one after the other.

B2
cont
12. (NEW) The display device of claim 9, wherein at least two orthogonal signals have opposed DC contents.

A2
cont
13. (NEW) The display device of claim 9, wherein the four elementary units of time are interwoven.

14. (NEW) The display device of claim 9,
wherein $p = 4$; and
wherein four orthogonal signals have identical DC contents and four orthogonal signals free from a DC voltage.

15. (NEW) The display device of claim 14, the DC content of 2 orthogonal signals of the orthogonal signals having an identical DC content is opposed to that of the two other orthogonal signals.

16. (NEW) The display device of claim 9, wherein said drive means inverts the orthogonal signals after each frame period.